(54) Title: METHOD AND APPARATUS FOR DYNAMIC SYSTEM-LEVEL FREQUENCY SCALING
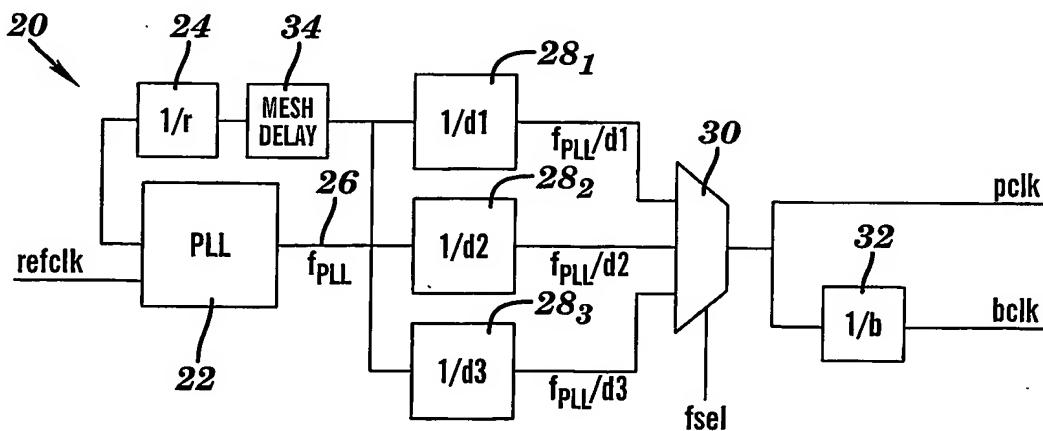
(57) Abstract: A method and apparatus for changing a clock frequency in a system (10) comprising a plurality of synchronous integrated circuit chips (12, 14, 16), and a circuit (20) for implementing the frequency change. The method includes: detecting a change in processing requirements in one of the plurality of synchronous integrated circuit chips; notifying the plurality of synchronous integrated circuit chips that a clock frequency change is to occur; achieving a quiescent bus state in each of the plurality of synchronous integrated circuit chips; notifying the plurality of synchronous integrated circuit chips that the clock frequency change can occur; and changing the clock frequency of the plurality of integrated circuit chips.